Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently amended) A mMethod of obtaining ⁶⁸Ga by:
 - (i) elution of a ⁶⁸Ge/⁶⁸Ga generator to provide a supply of eluate containing ⁶⁸Ga;
 - (ii) contacting <u>said</u> the eluate from a ⁶⁸Ge/⁶⁸Ga generator with an anion exchanger comprising HCO₃ as counterions, <u>so that the ⁶⁸Ga from step (i) binds to said anion exchanger</u>; and
 - (iii) eluting the bound ⁶⁸Ga of step (ii) from said anion exchanger.
- 2. (Currently amended) The mMethod according to claim 1 wherein the ⁶⁸Ge/⁶⁸Ga generator of step (i) comprises a column comprising titanium dioxide.
- 3. (Currently amended) <u>The mMethod according to claim 1 wherein in step (i)</u>, 0.05 to 5 M HCl is used to elute ⁶⁸Ga from the ⁶⁸Ge/⁶⁸Ga generator.
- 4. (Currently amended) The mMethod according to claim 2 wherein in step (i), 0.05 to 0.1 M HCl is used to elute ⁶⁸Ga from the ⁶⁸Ge/⁶⁸Ga generator.
- 5. (Currently amended) The mMethod according to claim 1 wherein in step (iii), water is used to elute ⁶⁸Ga from the anion exchanger.
- 6. (Currently amended) The mMethod according to claim 1 wherein the anion exchanger is an anion exchanger comprising quaternary amine functional groups.
- 7. (Currently amended) The mMethod according to claim 1 wherein the anion exchanger is an anion exchange resin based on polystyrene-divinylbenzene.

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8. (Previously presented) Method of producing a ⁶⁸Ga-radiolabelled complex by reacting ⁶⁸Ga obtained by the method according to claim 1 with a chelating agent.

- 9. (Original) Method according to claim 8 wherein the chelating agent is a macrocyclic chelating agent.
- 10. (Previously presented) Method according to claim 8 wherein the chelating agent comprises hard donor atoms, preferably O and N.
- 11. (Previously presented) Method according to claim 8 wherein the chelating agent is a bifunctional chelating agent
- 12. (Original) Method according to claim 11 wherein the chelating agent is a bifunctional chelating agent comprising a targeting vector selected from the group consisting of proteins, glycoproteins, lipoproteins, polypeptides, glycopolypeptides, lipopolypeptides, peptides, glycopeptides, lipopeptides, carbohydrates, nucleic acids, oligonucleotides or a part, a fragment, a derivative or a complex of the aforesaid compounds and small organic molecules.
- 13. (Previously presented) Method according to claim 8 wherein the reaction is carried out using microwave activation.
- 14. (Previously presented) Method according to claim 8 for the production of ⁶⁸Garadiolabelled PET tracers.
- 15. (Original) Kit for the preparation of ⁶⁸Ga from a ⁶⁸Ge/⁶⁸Ga generator, which comprises a generator column and a second column that comprises an anion exchanger comprising HCO₃⁻ as counterions.

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16. (Original) Kit according to claim 15 further comprising means to couple the columns in

series.

17. (Previously presented) Kit according to claim 15 further comprising aqueous HCl to elute

the ⁶⁸Ga from the generator column and/or water to elute the ⁶⁸Ga from the anion

exchanger column, preferably, the HCl and the water being aseptically and in a

hermetically sealed container.

18. (Previously presented) Kit according to claim 15 further comprising a chelating agent,

preferably a bifunctional chelating agent.

19. (Previously presented) A method of using a kit according to claim 18 for the production

of ⁶⁸Ga-radiolabelled PET tracers, comprising producing a ⁶⁸Ga-radiolabelled complex by

reacting ⁶⁸Ga obtained by the method according to claim 1 with the chelating agent.